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ATTORNEY DOCKET NO. CONFIRMATION NO. APPLICATION NO. FILING DATE FIRST NAMED INVENTOR 98730-000031/US 5406 10/680,197 Neng Liu 10/08/2003 EXAMINER 30593 7590 06/13/2005 HARNESS, DICKEY & PIERCE, P.L.C. BROUSSARD, COREY M P.O. BOX 8910 PAPER NUMBER ART UNIT RESTON, VA 20195

2835
DATE MAILED: 06/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)		
Office Action Comment	10/680,197	LIU, NENG		
Office Action Summary	Examiner	Art Unit		
	Corey M. Broussard	2835		
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).				
Status				
1) Responsive to communication(s) filed on <u>02 May 2005</u> .				
2a)⊠ This action is <b>FINAL</b> . 2b)□ This	☐ This action is <b>FINAL</b> . 2b) ☐ This action is non-final.			
	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is			
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.		
Disposition of Claims				
4) Claim(s) 1,4,6-11 and 14-20 is/are pending in the application.				
4a) Of the above claim(s) is/are withdraw	n from consideration.			
5) Claim(s) is/are allowed.				
	6)  Claim(s) <u>1,4,6-11 and 14-20</u> is/are rejected.			
, , ,	7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.			
o) Claim(s) are subject to restriction and/or election requirement.				
Application Papers				
9) The specification is objected to by the Examiner.				
10)⊠ The drawing(s) filed on <u>08 October 2003</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).				
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119				
12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some * c) ☐ None of:				
<ul> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> </ul>				
3. Copies of the certified copies of the priority documents have been received in this National Stage				
application from the International Bureau (PCT Rule 17.2(a)).				
* See the attached detailed Office action for a list of the certified copies not received.				
Attachment(s)				
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ate atent Application (PTO-152)		
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	6) Other:	atom, pphoanon (1 1 o 102)		

### **DETAILED ACTION**

## Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claims 9 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitation "shape of a cake" recited by the claims is vague and indefinite. How does the applicant define a cake and how is its shape applied to the claimed invention? Clarification is requested.

# Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 11, 14, and 15 are rejected under 35 U.S.C. 102(a) as being anticipated by Koo (US Pub 2003/0011972). With respect to claim 11, Koo teaches a compound power supply switch for notebook computers comprising: a coupling module (30) located on the display panel (20) having a latch element (33) at a latch position, the latch element being engaged with a coupling trough (15) located on the processor (10)

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at the latch position and being separated from the coupling trough at a unfastening position ("C", see Fig 7, 8), the latch moves substantially in parallel with the flat surface of the display panel (see Fig. 5); and a power supply control module having a power supply actuation element (53) and a power supply control circuit (the switch must inherently be connected to a circuit to function), the power supply actuation element abutting the unfastening position (see Fig. 7) and being triggered by the latch element when the latch element is located at the unfastening position to generate an actuating signal to activate the power supply of the processor through the power supply control circuit ([0034] lines 1-3, see Fig. 5-7); wherein the latch element has a rectangular actuating section (43) exposed outside the display panel (see Fig. 4-7) and extended int eh direction of the coupling trough (15) to form a hook section (45), and a bucking section (47) in contact with the elastic element (35, see Fig. 4-7); and wherein the coupling trough extends in the direction of the latch position to form a compartment to latch the hook section of the latch element (see fig. 6).

- 5. With respect to claim 14, Koo teaches wherein the power supply actuation element (53) is a pushbutton power supply switch (see Fig. 5-7) to generate an electromagnetic or current pulse signal through a brief contact with the latch element ([0034] lines 1-2).
- 6. With respect to claim 15, Koo teaches wherein the coupling module (30) and the power supply control module are located on the processor (10), the coupling trough (15) corresponding to the latch element (33) being located on the display panel (20, see [0040] lines 4-6).

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7. Claims 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Jung (PN 6,243,819). With respect to claim 16, Jung teaches a compound power supply switch comprising: a coupling module (see Fig. 3) located on the display panel (14) having a latch element (35) and at least one elastic element (37) to keep the latch element at a latch position, the latch element being engaged with a coupling trough (24) located on the processor at the latch position and being separated from the coupling trough at a unfastening position, the connecting track between the latch position and the unfastening position being substantially normal to the flat surface of the display panel (see Fig. 3, the button 34 moves in a direction substantially normal to the surface of 14); and a power supply control module (40) having a power supply actuation element (42) and a power supply control circuit (see Fig. 4), the power supply actuation element abutting the unfastening position and being triggered by the latch element when the latch element is located at the unfastening position to generate an actuating signal to activate the power supply of the processor through he power supply control circuit.

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8. With respect to claim 17, Jung teaches where the latch element is formed substantially in the shape of a cake and has a hook section (35) corresponding to the coupling trough (24), and an axle strut (36) located respectively on two side thereof to couple with the elastic element to push and turn the latch element about the axle strut to the unfastening position (see Fig. 3, when the button 34 is moved in the A direction about the axle the latch assumes the unfastening position).

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9. With respect to claim 18, Jung teaches the coupling trough (24) extends in the direction of the latch position to form a compartment (25) to latch the hook section of the latch element (35, see Fig. 3).

10. With respect to claim 19, Jung teaches the power supply actuation element (40) is a pushbutton power supply switch to generate an electromagnetic or current pulse signal through a brief contact with the latch element (col 5 lines 4-11).

# Claim Rejections - 35 USC § 103

- 11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 12. Claims 1, 4, 6, 7, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koo (US Pub 2003/0011972) in view of Goto et al. (PN 6,122,152). With respect to claim 1, Koo teaches a compound power supply switch for notebook computers comprising: a coupling module (30) located on the display panel (20) having a latch element (33) and at least one elastic element (35) to keep the latch element at a latch position, the latch element being engaged with a coupling trough (15) located on the processor (10) at the latch position and being separated from the coupling trough at a unfastening position ("C", see Fig 7, 8); and a power supply control module having a power supply actuation element (53) and a power supply control circuit (the switch must inherently be connected to a circuit to function), the power supply actuation element

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abutting the latch element when the latch element is located at unfastening position (see Fig. 7) and being triggered by the latch element when the latch element is located at the unfastening position to generate an actuating signal to activate the power supply of the processor through the power supply control circuit ([0034] lines 1-3, see Fig. 5-7); wherein the latch element has a hook section (45) and an exposed actuating section (43), the hook section being coupled with the coupling trough at the latch position (see Fig. 6); wherein the coupling trough (15) extends in the direction of the latch position to form a compartment to latch the hook section of the latch element (see Fig. 6). Koo lacks specific teaching of the power supply control circuit connecting to the power input end on the processor. Goto teaches wherein a power supply control module (switch 56 and associated circuit) circuit connects to a power supply input end located on the processor through the display panel (see col 9, lines 14-23 and col 14, lines 13-25 teaching the switch can be located on the display portion and control the main power of the processor). It would have been obvious to a person of ordinary skill in the art to combine the power-controlling latch of Koo with the power-controlling module of Goto for the benefit of automatically turning on and off the device when it is opened and closed allowing for greater power conservation.

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13. With respect to claim 4, Koo teaches wherein the power supply actuation element (53) is a pushbutton power supply switch (see Fig. 5-7) to generate an electromagnetic or current pulse signal through a brief contact with the latch element ([0034] lines 1-2).

- 14. With respect to claim 6 Koo teaches wherein the latch element (33) moves substantially in parallel with the flat surface of the display panel (21, see Fig. 4-7).
- 15. With respect to claim 7, Koo teaches wherein the latch element (33) has a rectangular actuating section (43) exposed outside the display panel and extended in the direction of the coupling trough to form a hook section (45), and a bucking section (47) in contact with the elastic element (35, see Fig. 4-7).
- 16. With respect to claim 10, Koo teaches wherein the coupling module (30) and the power supply control module are located on the processor (10), the coupling trough (15) corresponding to the latch element (33) being located on the display panel (20, see [0040] lines 4-6).
- 17. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koo (US Pub 2003/0011972) in view of Goto et al. (PN 6,122,152) as applied to claim 1 above, and further in view of Kim (PN 6,118,653). With respect to claim 8, Koo in view of Goto teaches the device as applied to claim 1 above, but lacks wherein the latch element moves substantially normal to the flat surface of the display panel. Kim teaches wherein a latch element (70, 40) moves substantially normal to the flat surface of the display panel (34, see Fig. 5, 10, the latch element is pushed in to disengage the hook 74 and then the axle 56 translates that motion outward as seen in Fig. 6, 11, a large component of this motion is normal to the display). It would have been obvious to a person of ordinary skill in the art to combine the latch and power supply switch as taught by Koo in view of Goto with the latch of Kim for the benefit of a latch with a built in camera and power switch offering better power conservation and greater battery life.

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18. With respect to claim 9, Kim teaches wherein the latch element is formed substantially in the shape of a cake and has a hook section (74) corresponding to the coupling trough (73), and an axle strut (56) located respectively on two side thereof (see Fig. 4, there must be two struts for the two accepting slots 63) to couple with the elastic element (78 is coupled to the spring through the outer housing and partition 52) to push and turn the latch element about the axle strut to the unfastening position (the actuator 71 is pushed in and this force is inherently translated by the axle struts into a turning motion moving the latch to the unfastening position).

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19. Claims 16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koo (US Pub 2003/0011972) in view of Kim (PN 6,118,653). With respect to claim 16, Koo teaches a compound power supply switch for notebook computers comprising: a coupling module (30) located on the display panel (20) having a latch element (33) and at least one elastic element (35) to keep the latch element at a latch position, the latch element being engaged with a coupling trough (15) located on the processor (10) at the latch position and being separated from the coupling trough at a unfastening position ("C", see Fig 7, 8); and a power supply control module having a power supply actuation element (53) and a power supply control circuit (the switch must inherently be connected to a circuit to function), the power supply actuation element abutting the latch element when the latch element is located at unfastening position (see Fig. 7) and being triggered by the latch element when the latch element is located at the unfastening position to generate an actuating signal to activate the power supply of the processor through the power supply control circuit ([0034] lines 1-3, see Fig. 5-7). Koo lacks

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wherein the latch element moves substantially normal to the flat surface of the display panel. Kim teaches a coupling module wherein the latch element (70, 40) moves substantially normally to the flat surface of the display panel (34, see Fig. 5, 10, the latch element is pushed in to disengage the hook 74 and then the axle 56 translates that motion outward as seen in Fig. 6, 11, a large component of this motion is normal to the display). It would have been obvious to a person of ordinary skill in the art to combine the compound coupling module of Koo with the coupling module of Kim for the benefit of a latch with a built in camera and power switch offering better power conservation and greater battery life.

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20. With respect to claim 20, Koo teaches wherein the coupling module (30) and the power supply control module are located on the processor (10), the coupling trough (15) corresponding to the latch element (33) being located on the display panel (20, [0040] lines 4-6).

# Response to Arguments

21. Applicant's arguments filed 5/02/05 have been fully considered but they are not persuasive. With respect to the remark that Goto et al. (PN 6,122,152) fails to disclose that the switch mechanism is located on a display panel, the Examiner respectfully disagrees. The preferred embodiment of Goto does teach that the switch mechanism is located on the processor, but Goto teaches reversing the preferred embodiment so that the switch mechanism is located on the display (col 14 lines 13-18). If the switch were located on the display as suggested by Goto, then the switch would inherently be

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required to pass through the display panel to the main power supply of the processor to function as a controller for the main power supply.

22. Applicant's arguments with respect to the claims rejected over Koo (US Pub 2003/0011972) and Jung (PN 6,243,819) have been considered but are most in view of the new grounds of rejection necessitated by the amendment.

#### Conclusion

23. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Corey M. Broussard whose telephone number is 571 272 2799. The examiner can normally be reached on 7:30-5 M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on 571 272 2092. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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